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| 10/722,691 | 11/24/2003 | Ronald S. Indeck | 53047/44791 | 8307 |

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| EXAMINER |
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FLEURANTIN, JEAN B

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| ART UNIT | PAPER NUMBER |
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2162

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,691

Applicant(s)

INDECK ET AL.

Examiner

JEAN B. FLEURANTIN

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-19, 33-36, 40, 41 and 53-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-19, 33-36, 40, 41, 53-61 and 64-81 is/are rejected.
- 7) ☒ Claim(s) 62 and 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/23/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to Applicant(s) arguments filed on 02 May 2005.
2. Claims 9-19, 33-36, 40, 41 and 53-81 remain pending for examination.

Information Disclosure Statement

3. The information disclosure statement (IDS) filed 23 May 2005 complies with the provision of M.P.E.P. 609. It has been placed in the application file. The information referred to therein has been considered as to merits. (See attached form).

Response to Applicant' Remarks

4. Applicant's arguments filed 02 May 2005 have been fully considered but they are not persuasive for the following reasons, see sections A and B.

Claim Rejections - 35 USC § 102

A. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-19, 33-36, 40, 41, 53-61 and 64-81 are rejected under 35 U.S.C. 102(b) as being anticipated over U.S. Patent No. 5,050,075 issued to Herman et al., as listed in the IDS ("hereinafter Herman").

As per claim 9, Herman discloses "a retrieval device for retrieving data from a mass storage medium including a matching circuit for comparing a determined key representative of the data sought to be retrieved with a data signal representative of a continuous stream of data read from said mass storage medium" (see col. 3, lines 31-47) and column 4, lines 40-55, "said determined key being an analog signal representative of the data itself and the data signal also being an analog signal" (see col. 3, lines 48-59).

As per claims 10, 13 and 35, Herman further discloses "a memory connected to said retrieval device for storing said retrieved data for access by another processor" as each unit receives the data base sub channels via a multiplexer (see col. 5, lines 40-51).

As per claims 11, 36 and 81, Herman discloses "said retrieval device is directly coupled to said mass storage medium and interfacing said mass storage medium with a processor desiring said retrieved data for processing thereof" (see col. 5, lines 40-51).

As per claims 12 and 18, Herman discloses "a retrieval device for retrieving data from a mass storage medium, said retrieval device being directly coupled to said mass storage medium and interfacing said mass storage medium with a processor desiring said retrieved data for processing thereof" (see col. 5, lines 40-51), "said retrieval device comprising a matching circuit for making a pattern comparison between a determined key representative of the data sought to be retrieved with a data signal representative of a continuous stream of data read from said mass storage medium" (see col. 3, lines 31-47) and column 4, lines 40-55.

As per claims 14 and 16, Herman discloses "said matching circuit is configured to match a digital key with a digital data signal" (see col. 3, lines 48-59).

As per claims 15 and 17, Herman further discloses "a plurality of mass storage media coupled to said matching circuit" (see col. 3, lines 31-39).

As per claim 33, the limitations of claim 33 are rejected in the analysis of claim 9, and this claim is rejected on that basis.

As per claim 34, Herman discloses "a retrieval device for retrieving data from a mass storage medium including a matching circuit for framelessly comparing a determined key representative of the data sought to be retrieved with a data signal representative of a continuous stream of data read from said mass storage medium" (see col. 3, lines 31-47) and column 4, lines 40-55, "said determined key being a digital representation of the data itself and the data signal also being digital" (see col. 3, lines 48-59).

As per claims 40, 41 79 and 80, Herman discloses "said matching circuit is configured to approximately match a digital key with a digital data signal" (see col. 3, lines 48-59).

As per claims 54, 55, 56 and 78, Herman further discloses "a system bus in communication with the retrieval, wherein the system bus is configured to provide a search request to the retrieval device" (see col. 3, lines 31-47) and column 4, lines 40-55, and "wherein the retrieval device is further configured to process the search request to determine the key" (see col. 3, lines 48-59).

As per claims 53 and 77, Herman discloses "a data retrieval system comprising: a mass storage medium in which data stored" (see col. 3, lines 31-59) "retrieval device in communication with the mass storage medium" as each unit receives the data base sub channels via a multiplexer (see col. 5, lines 40-51), "wherein the retrieval device is configured to (1) continuous stream of data read from the mass storage medium" (see col. 3, lines 31-47) and column 4, lines 40-55, and (2) "process the data stream to determined whether an approximate match exists therein with respect to a key that is representative of the data sought to be retrieved" (see col. 3, lines 48-59).

As per claim 57, Herman further discloses "a processor in communication with the system bus, wherein the processor is configured to place a search request on the system bus for receipt by the retrieval device" (see col. 3, lines 31-47) and column 4, lines 40-55.

As per claims 58 and 73, the limitations of claims 58 and 73 are rejected in the analysis of claim 9, and these claims are rejected on that basis.

As per claim 59, the limitations of claim 59 are rejected in the analysis of claim 34, and this claim is rejected on that basis.

As per claims 60, 64 and 65, the limitations of claims 60, 64 and 65 are rejected in the analysis of claim 9, and these claims are rejected on that basis.

As per claims 61, 66 and 72, Herman further discloses "wherein the retrieval device is further configured to perform the pattern comparison by calculating a correlation coefficient that is indicative of a degree of correlation between the key and the data stream" (see col. 10, line 21 to col. 11, line 60).

As per claim 67, the limitations of claim 67 are rejected in the analysis of claim 9, and this claim is rejected on that basis.

As per claim 68, Herman discloses "a retrieval device is further configured to determine whether an approximate match exists between the key the data stream via frameless matching" (see col. 3, lines 48-59).

As per claim 69, Herman discloses "the search request is representative of a user-specified query" (see col. 5, lines 57-60).

As per claim 70, Herman discloses "the retrieval device is further configured to determined a starting location in the mass storage medium that represents the location at which the data stream is to begin" (see col. 6, line 1-65).

As per claim 71, Herman discloses "the retrieval device is further configured to determined an ending location in the mass storage medium that represents the location at which the data stream is to determinate" (see col. 6, lines 1-65).

As per claims 74-76, the limitations of claims 74-76 are rejected in the analysis of claim 34, and these claims are rejected on that basis.

Claims objection(s)

- i) Claims 62 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2162

B. Applicant(s) stated, page 15, paragraph 4, that "Herman fails to anticipate Claim 9." Respectfully, Applicant(s) appear(s) to misinterpret the guidance given under MPEP 2142. In particular, references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969).

It is submitted that Herman discloses the claimed limitations as follow: "a retrieval device for retrieving data from a mass storage medium including a matching circuit for comparing a determined key representative of the data sought to be retrieved with a data signal representative of a continuous stream of data read from said mass storage medium" (see col. 3, lines 31-47) and column 4, lines 40-55, "said determined key being an analog signal representative of the data itself and the data signal also being an analog signal" (see col. 3, lines 48-59).

Furthermore, Herman discloses, MASK indicates which of the four bytes of word addressed by MEM is to be compared with the pattern (P) and (ID) serves to identify the query to which the instruction belongs. Each instruction of the form indicated calls for **comparing one or more bytes** of MEM with P for every record in the bit stream (see col. 7, 16-34). Also see column 5, lines 49-56, Herman discloses, the records comprising the bit streams on the data base sub channels are transmitted via the framer circuits to the data filters (30). There is one framer and one filter for each database sub channel. Each IR unit comprises a master controller for managing four VLSI data filter

units (30). The data filters (30) perform the query operations on the records comprising the database sub channels.

Applicant's argument, page 17, last paragraph, with respect to claim 62, "... configured to determine that an approximate match exists if the correlation coefficient has a larger than or equal to a predetermined threshold." Have been persuasive the rejection of claim 12 has been withdrawn.

MPEP 2111 Claim Interpretation; Broadest Reasonable Interpretation

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). The court found that applicant was advocating ... the impermissible importation of subject matter from the specification into the claim. See also In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in application's specification.").

Art Unit: 2162

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

For the above reasons, it is believed that the last Office Action was proper.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2162

CONTACT INFORMATION

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

July 12, 2005


MOHAMMAD ALI
PRIMARY EXAMINER
